

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 2004/050092

## A. CLASSIFICATION OF SUBJECT MATTER

**IPC7: G06F 3/14, G06F 13/12, G09G 5/39**

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

**IPC7: G06F, G09G**

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

**SE,DK,FI,NO classes as above**

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## EPO-INTERNAL, WPI DATA

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6538653 B1 (KATSURA, K ET AL), 25 March 2003 (25.03.2003) --	1-13
A	US 5790881 A (NGUYEN, J T), 4 August 1998 (04.08.1998) --	1-13
A	US 6091863 A (NAKASHIMA, K ET AL), 18 July 2000 (18.07.2000) --	1-13
A	US 6222564 B1 (STURGES, J J), 24 April 2001 (24.04.2001) --	1-13

Further documents are listed in the continuation of Box C.

See patent family annex.

\* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search  
14 October 2004

Date of mailing of the international search report  
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**C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5450542 A (LEHMAN, J A ET AL), 12 Sept 1995 (12.09.1995) -- -----	1-13

## INTERNATIONAL SEARCH REPORT

Information on patent family members

03/09/2004

International application No.

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US	6538653	A	25/03/2003	US	6697070	B	24/02/2004
				DE	3689917	D,T	22/09/1994
				EP	0215428	A,B	25/03/1987
				JP	2066523	C	10/07/1996
				JP	7062794	B	05/07/1995
				JP	62062390	A	19/03/1987
				JP	62110562	U	14/07/1987
				KR	9207342	Y	12/10/1992
				KR	9600884	B	13/01/1996
				KR	9600885	B	13/01/1996
				US	4947342	A	07/08/1990
				US	5751930	A	12/05/1998
<hr/>				<hr/>			
US	5790881	A	04/08/1998	AU	4912096	A	27/08/1996
				WO	9624901	A	15/08/1996
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US	6091863	A	18/07/2000	CN	1132121	B	24/12/2003
				CN	1147117	A	09/04/1997
				JP	3106872	B	06/11/2000
				JP	8077366	A	22/03/1996
				TW	473692	B	00/00/0000
<hr/>				<hr/>			
US	6222564	B1	24/04/2001	US	5854637	A	29/12/1998
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US	5450542	A	12/09/1995	JP	9505424	T	27/05/1997
				WO	9515527	A	08/06/1995
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